

BIOLOGY 400 – History of Biology

Spring 2022

Department of Biology, University of Victoria

Welcome back to the online world

As you know, UVic has moved most of its Spring 2022 courses online from January 10 to January 23, due to you-know-what. In Biology 400, we will observe this shift.

The current plan is to resume face-to-face instruction on Monday, January 24. If this virus has taught us one thing, however, is that it is full of malicious surprises, and we therefore cannot give you any assurance that we will be face-to-face on that date. However, you should assume that we will be, and you should prepare accordingly. That means being present in Victoria and, out of consideration for the campus community around you, being vaccinated all the way to your booster shot (if you are eligible for one by then).

A. Basic Course Information

Course Description

The historical development of the major techniques and ideas of biology, including the significance of the important contributors to biology. The treatment will be part chronological, part topical.

Live lecture meetings (beginning Monday, January 24, tentatively)

A01 – Tuesday, Wednesday and Friday, 12:30 – 1:20 PM, Bob Wright B150

Instructor

Dr. Greg Beaulieu

Email: gregoryb@uvic.ca. If you send an email, please put "Biology 400" in the message line.

Phone: 721-7140

I will have Zoom office hours (Tuesdays, 2:00 – 3:00), and I will be available for Zoom appointments outside my office hours.

Prerequisite

Third year standing.

Readings

I will post pdfs of selected readings on the Brightspace site when they become relevant as we progress through the course. There is no text or course pack to buy.

Course website

Biology 400 has a Brightspace website. As a registered student in this course, you will automatically be enrolled in this site.

On the site you will find course business notices, lecture PowerPoints and pdfs, test results and so on. Please check the site before each class.

Course Topics (tentative)

- Introduction
- The roots of biology
- Biology in the ancient world
- The Islamic world and medieval Europe
- Hidden and mythical organisms
- The human body: the Scientific Revolution and after
- The early days of microscopy
- Biology and the emerging physical sciences: chemistry
- Describing and arranging organisms
- Biology and the emerging physical sciences: geology
- Evolution before Darwin
- Darwin
- Cells, the units of life
- Heredity
- Evolution and genetics come together
- The hereditary material
- TD Lysenko and Soviet biology

B. Evaluation

Components of your course grade

Packback participation	25% (See C below)
Midterm exam (Friday, February 18)	30%
Final Exam (April final exam period)	45%
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	100%

Exam methods

The university is expecting to resume F2F activities on Monday, January 24. If this happens, then the midterm will be written in class, on paper, and the final exam will be written in the gym, also on paper.

If we must remain online, however, the exams will be given on Brightspace. You will find them as follows: “Course Tools” > “Quizzes”.

Midterm exam

The midterm exam will be all multiple choice.

Final exam

The final exam will be mixed format, with two parts.

Part 1 – There will be a noncumulative multiple choice section worth half of the exam points; these questions will be concerned with material we have covered since the midterm.

Part 2 – The exam will also have an essay question that will require a written answer of 500 – 600 words or so; you will be asked to integrate various parts of the entire course in your answer to this question. This essay will be worth the other half of the final exam points.

The final exam is an essential component of the course; if you do not write the final exam, you will receive a grade of N.

Missed exams

If you must miss the midterm exam because of illness, accident, family affliction, or competition as a UVic athlete, you must notify Dr. Beaulieu as soon as possible (gregoryb@uvic.ca). **You will not be required to provide a medical note or other documentation.**

The final exam can be deferred in cases of illness, accident, family affliction, or commitments as a UVic athlete. If you expect to miss the final exam for any of these reasons, please notify the course coordinator (Dr. Beaulieu) as soon as

possible, either by phone, email or in person. **You will not be required to provide a note or other documentation.** You must also fill out a Request for Academic Concession (RAC) form, available from Undergraduate Admissions and Records in the University Center or online:

<http://www.uvic.ca/registrar/assets/docs/record-forms/rac.pdf>

Travel plans are not a valid reason for missing the midterm exam or the final exam.

This term, the final exam period ends for all faculties on Friday, April 29; the university's last exam will be in the evening of that day. Your last exam might be on this date, or it might be sooner – you will know for sure when the final exam schedule is drawn up in February.

Grading Policy

At the University of Victoria, grades are submitted by instructors as percentages. These will be converted to letter grades by administration, according to this grading scale:

A+	90 – 100%	B+	77 – 79%	C+	65 – 69%
A	85 – 89%	B	73 – 76	C	60 – 64%
A-	80 – 84%	B-	70 – 72%	D	50 – 59%

The only circumstances under which I change a submitted course grade is if I have made a calculation error, or if a student has deferred the final exam, received an N, and then written a deferred final.

Please do not ask me to raise your percent grade in order to qualify you for a higher letter grade. I turn down all such requests.

You will receive an F in the course if your aggregate grade is less than 50% (rounded to the nearest whole number). It is not necessary to pass any individual exam in order to pass the course.

You will receive an N in the course if you miss the final exam in April and do not write a deferred final exam.

No supplemental final exam (second-chance final exam) will be given in this course, although, as described above, you may defer the final exam for any of the reasons given.

C. Packback

What is it?

Packback is an online platform for discussion among students. You will probably have been contacted already by the company about signing up.

Since Biology 400 has only third-year standing as a prereq, there are students from many different academic backgrounds registered here. That has always been one of the strengths of the course and one of its pleasures to me. I am hoping that Packback will be better able to bring together students with different knowledge, ideas and values than has previously been the case in Biology 400.

Cost

The cost is \$29; it is less if you have used the platform in previous courses at UVic. I thought long and hard about whether the cost was justified, and I concluded that it was worth a try. Some of my colleagues have used it in their courses and have had positive things to say about it.

The Bookstore used to sell a course pack for Biology 400 at a cost of \$29, but I have moved this material online for free, so you are not paying more than what students have traditionally paid in this course.

How it works, what you will do, and how you will be assessed

The idea behind the platform is that you will post one discussion question per week, related to the course material in some way, and reply to two questions from other students per week. Each question and response is worth 10 points, or 30 points per week total. You don't have to respond only to questions posted that week; it's fine if you respond to earlier questions. Your response will be time-stamped, and will count toward your current week's participation.

The questions will be assessed for their quality by the platform's AI. Questions that pertain to closed, easily-lookuppable issues ("When was Aristotle born?") get low marks; more open-ended questions score higher. The score a post gets is called its "Curiosity Score". I have set the minimum curiosity score at 40, which is on the low side according to the company. I thought it advisable to try it this way initially, though, due to the wide disparity in the class population in terms of academic background. After the AI tells you what it thinks of your question or response, you may edit and improve it. It is only your edited post that will count, or your one post if you choose not to edit.

If the AI thinks your final post deserves a score of 40 or more, you get 10 points in the course grade book for the post. If your post and your edited post go below this minimum, you will get 5 points.

Your participation in Packback will be worth 25% of your course grade. The platform determines your grade, not me. So I will not mark you up or down depending on what I read.

When you log in to Packback, there will be a button to click (“Packback Tutorial”) to get you started.

Deadlines

The deadline for your posts each week is Saturday at 5:00 PM, PST. There will be no deadline the first Saturday of the term (January 15), nor the Saturday of Reading Break (February 26). For the last week of the term, the deadline will be the last day of classes, Thursday, April 7. The full list of deadlines:

Saturday, January 22, 5:00 PM (PST)
Saturday, January 29, 5:00 PM (PST)
Saturday, February 5, 5:00 PM (PST)
Saturday, February 12, 5:00 PM (PST)
Saturday, February 19, 5:00 PM (PST)
Saturday, March 5, 5:00 PM (PST)
Saturday, March 12, 5:00 PM (PST)
Saturday, March 19, 5:00 PM (PST)
Saturday, March 26, 5:00 PM (PST)
Saturday, April 2, 5:00 PM (PST)
Thursday, April 7, 5:00 PM (PST)

Coupla more notes

I will not be looking at all your posts and replies. With 260 students, and each person posting three things per week, the volume would be overwhelming. But I will be reading some of the posts every week. I might draw the class’s attention to some of the more interesting questions and responses that I see.

When you post either a question or a reply, please try to bear in mind the academic habit of respectful, impersonal discourse. Don’t use foul language, don’t insult any person or any group of people, and don’t attribute someone’s statements or values to group membership (“You’re just saying that because you are an X.”) This is bad for two reasons. One, it is stereotyping and assumes the person to be no more than a mindless member of a group, rather than a thinking individual. And two, it

commits a logical fallacy: the Genetic Fallacy (evaluating the truth value of a statement according to who says it, or their motive for saying it, instead of the evidence for or against it.)

D. University Statements and Policies

Cheating and Plagiarism

The University and the Biology Department deal with cheating and plagiarism as a serious matter, since ignoring it could be interpreted as endorsing dishonest practice in one's later professional career. To claim ignorance of the University's policy on academic integrity is, therefore, not excused. Please read the policy carefully to avoid unpleasant misunderstandings. The policy can be found on the online UVic calendar:

<https://web.uvic.ca/calendar2022-01/undergrad/info/regulations/academic-integrity.html>

The University of Victoria Department of Biology reserves the right to use plagiarism detection software or other platforms to assess the integrity of student work.

UVic official territory acknowledgement

“We acknowledge and respect the lək^wəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.”

E. Important Dates

On the UVic website you will find a fuller list of important dates, but the ones we have listed below are the ones that will matter to students in Biology 400 and to students wishing to add the course this term. Course-specific dates are bolded.

Monday, January 10	First day of classes; online until January 24
Sunday, January 23	Last day for 100% reduction of tuition fees for standard courses.
Tuesday, January 25	In-person instruction resumes in Biology 400; this date might change, depending on events
Wednesday, January 26	Last day for adding courses

Sunday, February 13	Last day for 50% reduction in tuition fees for standard courses. 100% of tuition fees will be assessed for courses dropped after this date.
Friday, February 18	Midterm exam
Monday, February 21 – Friday, February 25	Reading break; no classes
Monday, February 28	Last day for withdrawing from courses without penalty of failure
Thursday, April 7	Last day of classes
Monday, April 11 – Friday, April 29	Final exam period

Appendix – The First Two Weeks of the Course

At the moment, UVic intends its courses to be online until Monday, January 24. During this two-week period, my first five lectures will be made available on the course Brightspace site as PowerPoint presentations (converted to video mp4s), which you can watch any time. There will be no synchronous Zoom classes, except for the first introductory class on January 11.

I will post the PowerPoint videos on the dates of our regular lectures:

Wednesday, January 12

Friday, January 14

Tuesday, January 18

Wednesday, January 19

Friday, January 21

If, hopefully, UVic is back F2F on Monday, January 24, I will be in class to deliver live lectures. However, I will still post mp4s of the lectures for those students who have health vulnerabilities or who live with people who have such vulnerabilities.

If we remain online past January 24, I will continue to post the mp4s of my PowerPoints.